

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) In a network system including a server system, and a client system, and a firewall wherein the server system monitors the occurrence of events, sends notification through the firewall to the client system after one of the monitored events occurs, a method for efficiently notifying the client system of the occurrence of a monitored event, so as to provide notification in a manner preserving the processing capacity of the server system and the client system, and preserving bandwidth on the network system, the method comprising:

an act of the client system sending a request to the server system, wherein the request is that the server system transmit a packet of data containing notification of the occurrence of an event to the client system using a connectionless protocol, wherein the connectionless protocol does not require a session be established between the client system and the server system in order for communication to occur between the client system and the server system;

an act of the client system attempting to receive a the packet of data containing notification of the occurrence of an event from the server system, wherein the packet of data is sent using the connectionless protocol;

an act of the client system determining, based on the act of attempting to receive a the packet of data from the server system, whether or not the client system can receive notifications, generated as the result of the happening of a monitored event, from the server system using a connectionless protocol,

an act of the client system requesting that server system initiated notifications be sent using the connectionless protocol, if the attempt to receive the packet of data is successful; and

an act of the client system requesting that server system initiated notifications be sent using a connection-oriented protocol, if the attempt to receive the packet of data is not successful, wherein the connection-oriented protocol establishes a session between the client system and the server system in order for communication to occur between the client system and the server system:;

an act of the client system detecting changes in firewall configuration including changes indicating that data packets sent via a connectionless protocol are being allowed through the firewall; and

upon determining that data packets sent via a connectionless protocol are being allowed through the firewall, an act of the client system automatically shifting to receiving data packets containing event notifications via the connectionless protocol even though a connection-oriented protocol is available.

2. (Previously Presented) The method as recited in claim 1, wherein the act of the client system requesting server system initiated notifications be sent using a connection-oriented protocol, further comprises an act of the client system attempting to establish a connection to the server system using the connection-oriented protocol.

3. (Cancelled)

4. (Original) The method as recited in claim 1, wherein the attempt to receive the packet of data is not successful if the packet of data is not received within a prespecified period of time.

5. (Original) The method as recited in claim 1, wherein the connection-oriented protocol is the Transmission Control Protocol.

6. (Original) The method as recited in claim 1, wherein the connectionless protocol is the User Datagram Protocol.

7. (Previously Presented) The method as recited in claim 1, wherein the act of the client system requesting that server system initiated notifications be sent using the connectionless protocol comprises an act of making an express request that notifications be sent using the connectionless protocol.

8. (Previously Presented) The method as recited in claim 1, wherein the server is configured to, by default, send notifications using a connectionless protocol absent any instruction to the contrary, wherein the act of the client system requesting that server system initiated notifications be sent using the connectionless protocol comprises an act of abstaining from making an express request thereby impliedly requesting that server system initiated notifications be sent using the connectionless protocol.

9. (Cancelled)

10. (Currently Amended) In a network system including a server system, and a client system, and a firewall wherein the server system monitors the occurrence of events, sends notification through the firewall to the client system after one of the monitored events occurs, a method for determining if notification from the server system to the client system is viable, using a connectionless protocol, so as to provide notification in a manner preserving the processing capacity of the server system and the client system, and preserving bandwidth on the network system, the method comprising:

a step for the client system to determine if communication can be received from the server system using the connectionless protocol, wherein the connectionless protocol does not require a session be established between the client system and the server system in order for communication to occur between the client system and the server system;

an act of the client system determining, based on the act of attempting to receive a packet of data from the server system, whether or not the client system can receive notifications, generated as the result of the happening of a monitored event, from the server system using a connectionless protocol,

an act of the client system requesting that server system initiated notifications be sent using the connectionless protocol, if the attempt to receive the packet of data is successful; and

an act of the client system requesting that server system initiated notifications be sent using a connection-oriented protocol, if the attempt to receive the packet of data is not successful, wherein the connection-oriented protocol establishes a session between the client system and the server system in order for communication to occur between the client system and the server system;

an act of the client system detecting changes in firewall configuration including changes indicating that data packets sent via a connectionless protocol are being allowed through the firewall; and

upon determining that data packets sent via a connectionless protocol are being allowed through the firewall, an act of the client system automatically shifting to receiving data packets containing event notifications via the connectionless protocol even though a connection-oriented protocol is available.

11. (Original) The method as recited in claim 10, wherein the act of the client system requesting server system initiated notifications be sent using a connection-oriented protocol, further comprises an act of the client system attempting to establish a connection to the server system using the connection-oriented protocol.

12. (Cancelled)

13. (Original) The method as recited in claim 10, wherein the attempt to receive the packet of data is unsuccessful if the packet of data is not received within a prespecified period of time.

14. (Original) The method as recited in claim 10, wherein the connection-oriented protocol is the Transmission Control Protocol.

15. (Original) The method as recited in claim 10, wherein the connectionless protocol is the User Datagram Protocol.

16. (Original) The method as recited in claim 10, wherein the act of the client system requesting that server system initiated notifications be sent using the connectionless protocol comprises an act of making an express request that notifications be sent using the connectionless protocol.

17. (Original) The method as recited in claim 10, wherein the server is configured to, by default, send notifications using a connectionless protocol absent any instruction to the contrary, wherein the act of the client system requesting that server system initiated notifications be sent using the connectionless protocol comprises an act of abstaining from making an express request thereby impliedly requesting that server system initiated notifications be sent using the connectionless protocol.

18. (Cancelled)

19. (Previously Presented) The method as recited in claim 10, wherein the step for the client system to determine if communication can be received from the server system using the connectionless protocol comprises the following:

an act of the client system sending a request to the server system, wherein the request is that the server system transmit a packet of data to the client system using a connectionless protocol; and

an act of the client system attempting to receive a packet of data from the server system, wherein the packet of data is sent using a connectionless protocol.

20. (Currently Amended) A computer product claim for implementing, in a network system including a server system and a client system, wherein the server system monitors the occurrence of events, sends notification to the client system after one of the monitored events occurs, a method for efficiently notifying the client system, so as to provide notification in a manner preserving the processing capacity of the server system and the client system, and preserving bandwidth on the network system, the computer product comprising:

a computer-readable medium carry computer executable-instructions that, when executed at the client computer, cause the client system to perform the following:

an act of sending a request to the server system, wherein the request is that the server system transmit a packet of data containing notification of the occurrence of an event to the client system using a connectionless protocol, wherein the connectionless protocol does not require a session be established between the client system and the server system in order for communication to occur between the client system and the server system;

an act of attempting to receive a the packet of data containing notification of the occurrence of an event from the server system, wherein the packet of data is sent using the connectionless protocol;

an act of the client system determining, based on the act of attempting to receive a the packet of data from the server system, whether or not the client system can receive notifications, generated as the result of the happening of a monitored event, from the server system using a connectionless protocol,

an act of requesting that server system initiated notifications be sent using the connectionless protocol, if the attempt to receive the packet of data is successful; and

an act of requesting that server system initiated notifications be sent using a connection-oriented protocol, if the attempt to receive the packet of data is not successful, wherein the connection-oriented protocol establishes a session between the client system and the server system in order for communication to occur between the client system and the server system;.

an act of the client system detecting changes in firewall configuration including changes indicating that data packets sent via a connectionless protocol are being allowed through the firewall; and

upon determining that data packets sent via a connectionless protocol are being allowed through the firewall, an act of the client system automatically shifting to receiving data packets containing event notifications via the connectionless protocol even though a connection-oriented protocol is available.

21. (Original) The computer product as recited in claim 20, wherein the act of requesting server system initiated notifications be sent using a connection-oriented protocol, further comprises an act of attempting to establish a connection to the server system using the connection-oriented protocol.

22. (Cancelled)

23. (Original) The computer program product as recited in claim 20, wherein the attempt to receive the packet of data is unsuccessful if the packet of data is not received within a prespecified period of time.

24. (Original) The computer program product as recited in claim 20, wherein the connection-oriented protocol is the Transmission Control Protocol.

25. (Original) The computer program product as recited in claim 20, wherein the connectionless protocol is the User Datagram Protocol.

26. (Original) The computer program product as recited in claim 20, wherein the computer-readable medium comprises one or more physical storage media.

27. (Previously Presented) The method of claim 1, wherein the act of the client system sending a request to the server system, wherein the request is that the server system transmit a packet of data to the client system using a connectionless protocol comprises sending a message using a connection-oriented protocol.

28. (Previously Presented) The method of claim 1, wherein the act of the client system sending a request to the server system, wherein the request is that the server system transmit a packet of data to the client system using a connectionless protocol is performed at some time before the notification of an event might occur.

29. (Cancelled)